

## FIELD INFO

Field Name: mobitech  
Area: 0.39 ha  
Crop Name: Coconut  
Sowing Date: 2005-01-01  
Growth Stage: -

## WEATHER INFO

Temperature: Min 23°C, Max 34°C  
Humidity: 85%  
Wind Speed: Approximately 6 m/s.

## RESENT IMAGE

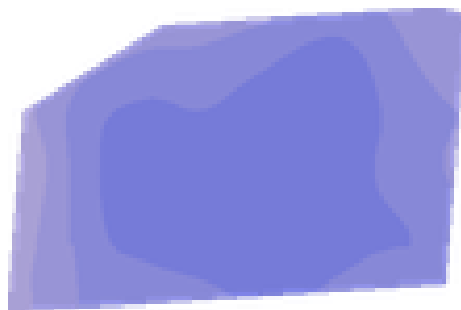
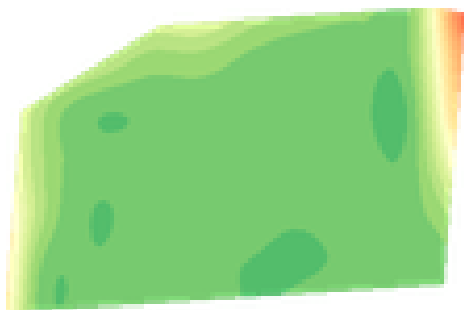
Date: 14/05/2025

NDVI

0.70

NDMI

0.22



### NDVI (Normalized Difference Vegetation Index)

Value: 0.70 (Change: +0.01)

**Explanation:** NDVI measures the greenness and health of vegetation using satellite imagery. A higher NDVI value indicates strong plant vigor and healthy canopy cover.

- 0.70 suggests that the coconut plants are in good condition, actively photosynthesizing.
- The +0.01 change indicates a slight increase in vegetation health compared to the previous reading.

### NDMI (Normalized Difference Moisture Index)

Value: 0.22 (Change: -0.01)

**Explanation:** NDMI assesses moisture content in vegetation by analyzing near-infrared and shortwave infrared bands.

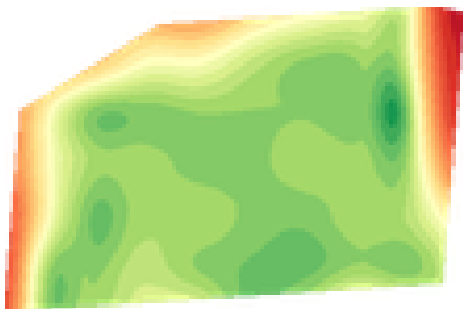
- A low NDMI value (0.22) may indicate limited water availability in the coconut trees.
- The -0.01 change suggests a slight decline in moisture, possibly due to evaporation, reduced rainfall, or soil drying.

## RESENT IMAGE

Date: 14/05/2025

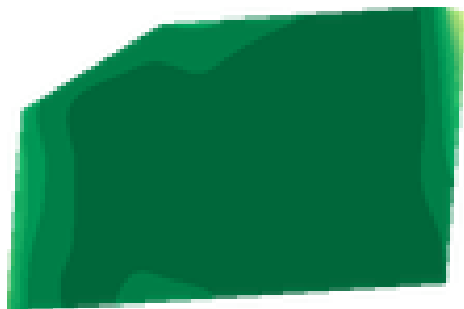
RECI

5.66



MSAVI

0.47



## RECI (Red Edge Chlorophyll Index)

Value: 5.66 (Change: +0.02)

**Explanation:** RECI measures chlorophyll content in plants, which is linked to nitrogen levels and photosynthetic activity.

- A high RECI value (5.66) suggests strong chlorophyll concentration, meaning the trees are actively producing energy.
- The +0.02 increase indicates better nutrient absorption, possibly due to fertilization or improved soil conditions.

## MSAVI (Modified Soil-Adjusted Vegetation Index)

Value: 0.47 (Change: 0)

**Explanation:** MSAVI accounts for vegetation growth while reducing soil noise interference in calculations.

- The 0.47 value suggests moderate vegetation growth, but some soil influence might still be present.
- The zero change indicates consistent plant development without major shifts.

RESENT IMAGE

Date: 14/05/2025

NDRE

0.44



NDRE (Normalized Difference Red Edge Index)

Value: 0.44 (Change: +0.03)

**Explanation:** NDRE helps monitor leaf chlorophyll content and is particularly useful for detecting early signs of nutrient stress.

- The 0.44 value implies that the trees have a moderate level of chlorophyll, indicating good plant health.
- The +0.03 increase may suggest recent improvements in nutrient uptake, potentially due to fertilization or rain effects.

Overall Analysis

- Plant Health: NDVI and RECI confirm healthy coconut growth.
- Moisture Status: NDMI indicates slightly low moisture, requiring monitoring.
- Nutrient Levels: RECI and NDRE suggest strong chlorophyll production, meaning fertilization is effective.
- Growth Consistency: MSAVI remains steady, showing stable development.

Trend Analysis

- Significant drop in NDVI values since the peak observed in late 2024. Current NDVI values indicate stress and possible health decline in coconut plants due to a combination of weather conditions and possible diseases.

## RESENT IMAGE

Date: 14/05/2025

### Current risks

- **Disease Pressure:** High humidity combined with wet conditions creates a conducive environment for fungal diseases.
- **Flooding Potential:** The risk of soil saturation is high; it's essential to monitor drainage and adjust irrigation accordingly.

### Recommendations

- **Immediate Actions:**
  - Monitor soil moisture levels closely and adjust irrigation to prevent waterlogging.
  - Implement scouting for early disease detection and apply fungicides as necessary.
- **Long-term Strategies:**
  - Review nutrient supply and potentially increase inputs to recover plant health.
  - Enhance field drainage systems to reduce flooding risk in future rainy events.

By addressing these factors, you can help safeguard the health of your coconut crop and improve overall field performance

### Final Insight for the Farmer

Your coconut trees have been growing well, but recently, they've started showing signs of stress, possibly due to weather changes or early disease symptoms. Moisture levels in the soil are a bit low, so it's important to adjust irrigation carefully—too little water can dry out the plants, while too much can lead to waterlogging. You should also keep an eye out for fungal infections, as high humidity can cause problems. If needed, applying preventive fungicides can help protect the plants.

For the long run, making sure nutrients are well-balanced will keep the trees healthy, and improving drainage can prevent flooding during rainy seasons. By following these steps, you can keep your coconut crop strong and ensure a good harvest in the future!

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